

2008-09 Winter Outlook

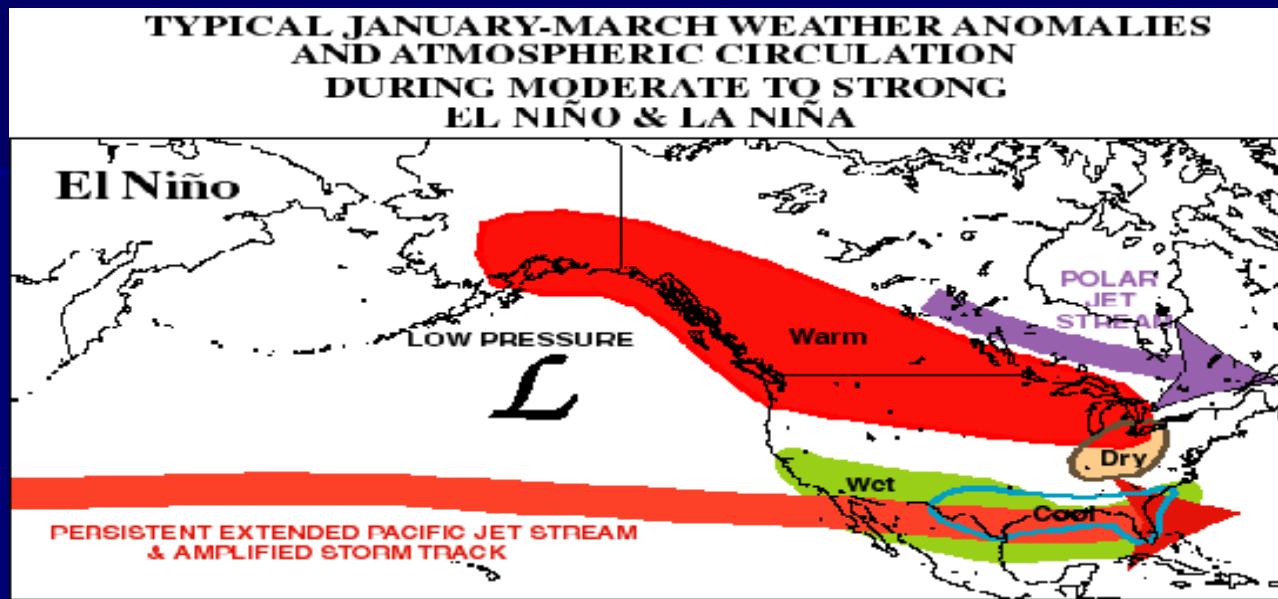


**National Weather Service
17 September 2008**

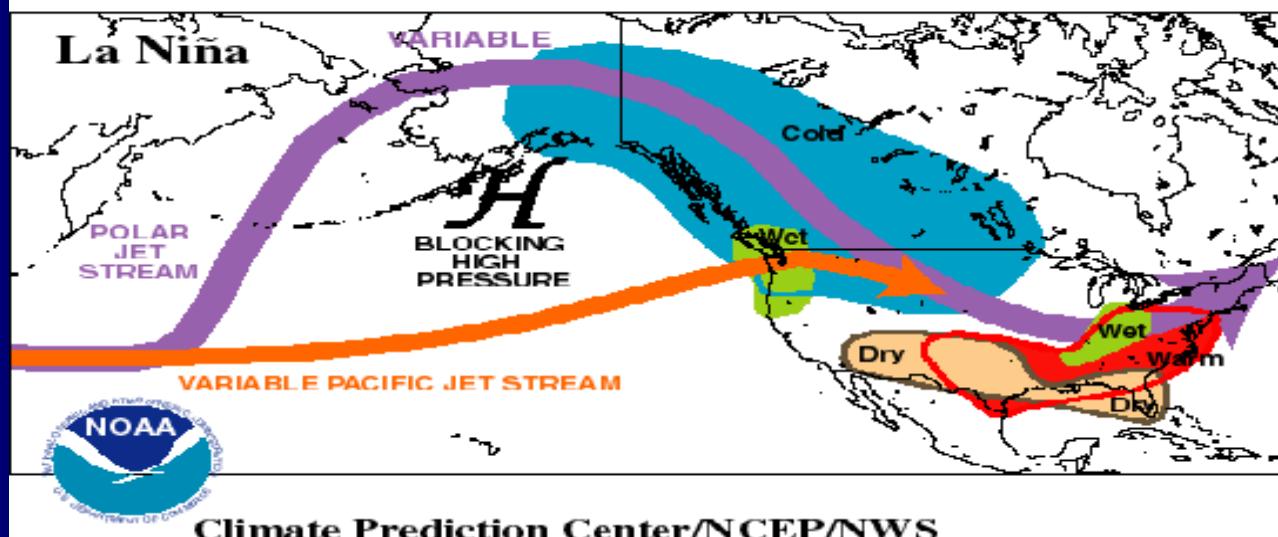


Winter Outlook 2008-09

El Niño



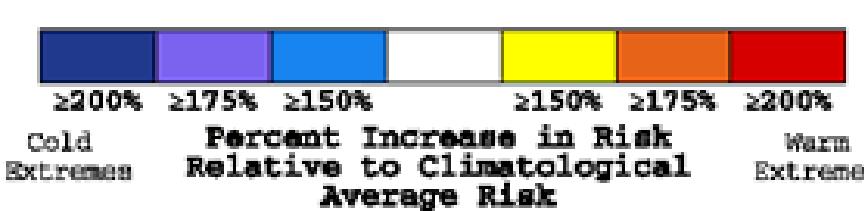
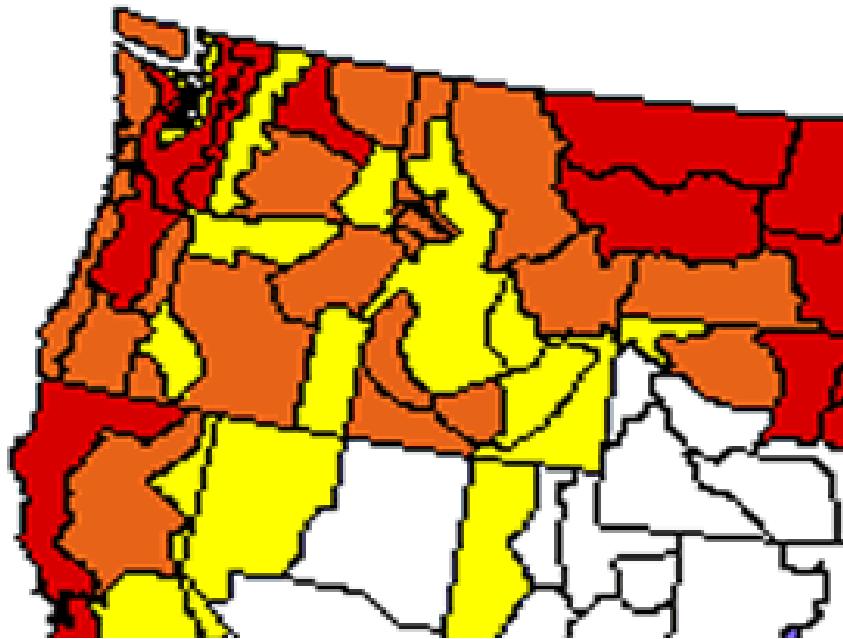
La Niña



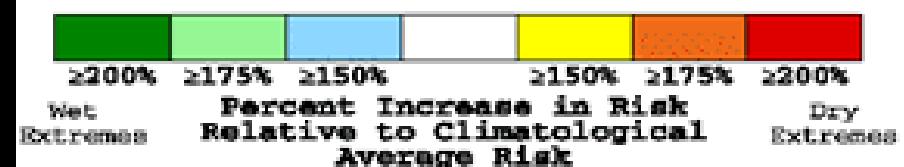
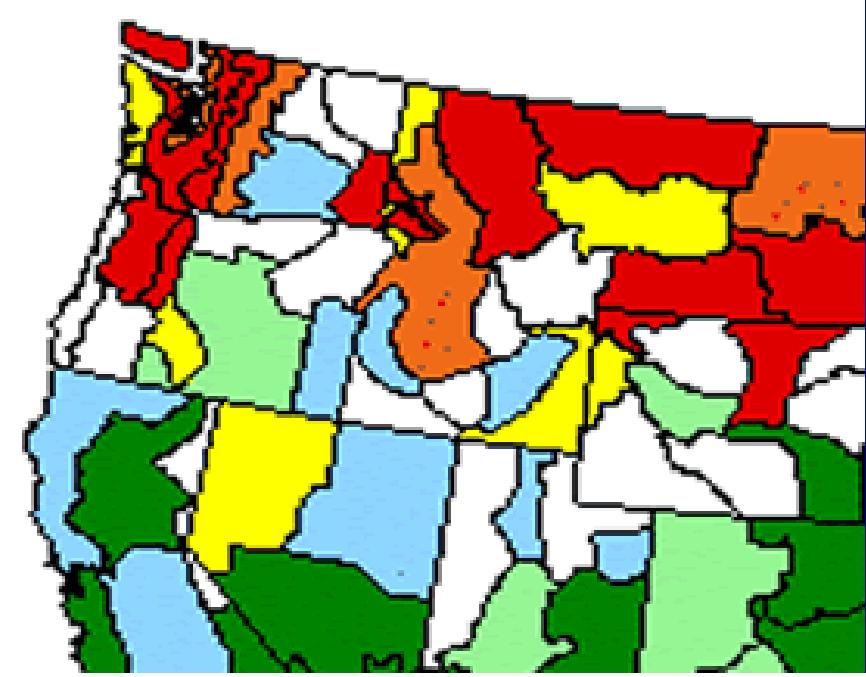


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El Niño Impacts



Temperature

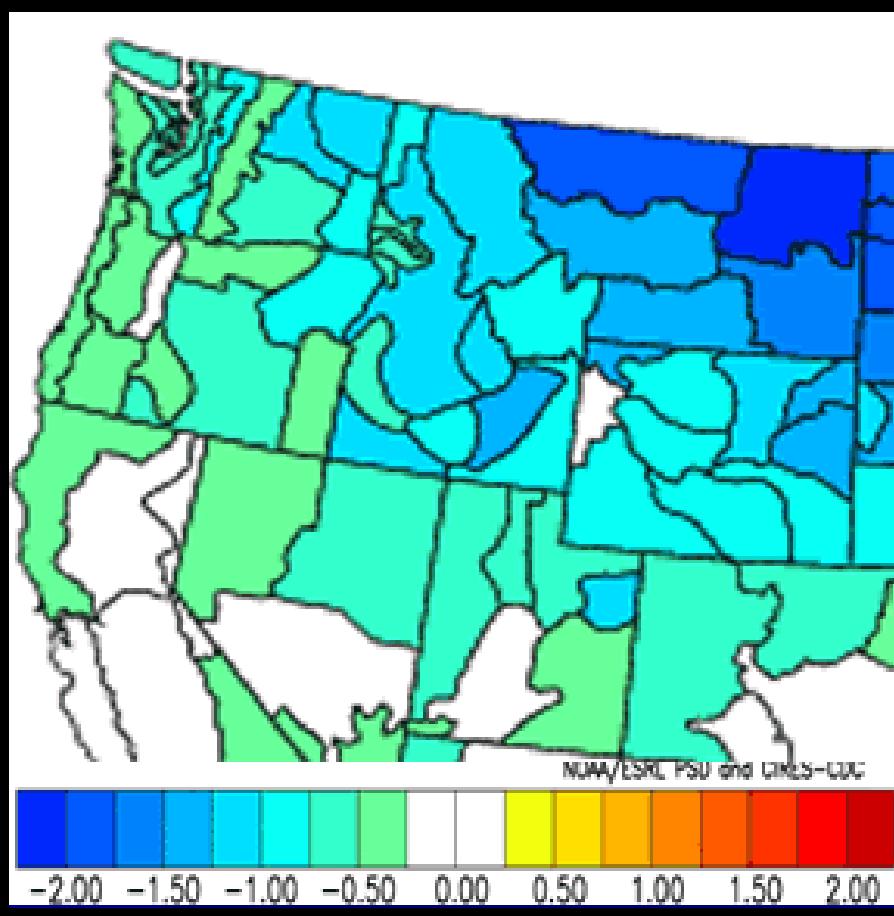


Precipitation

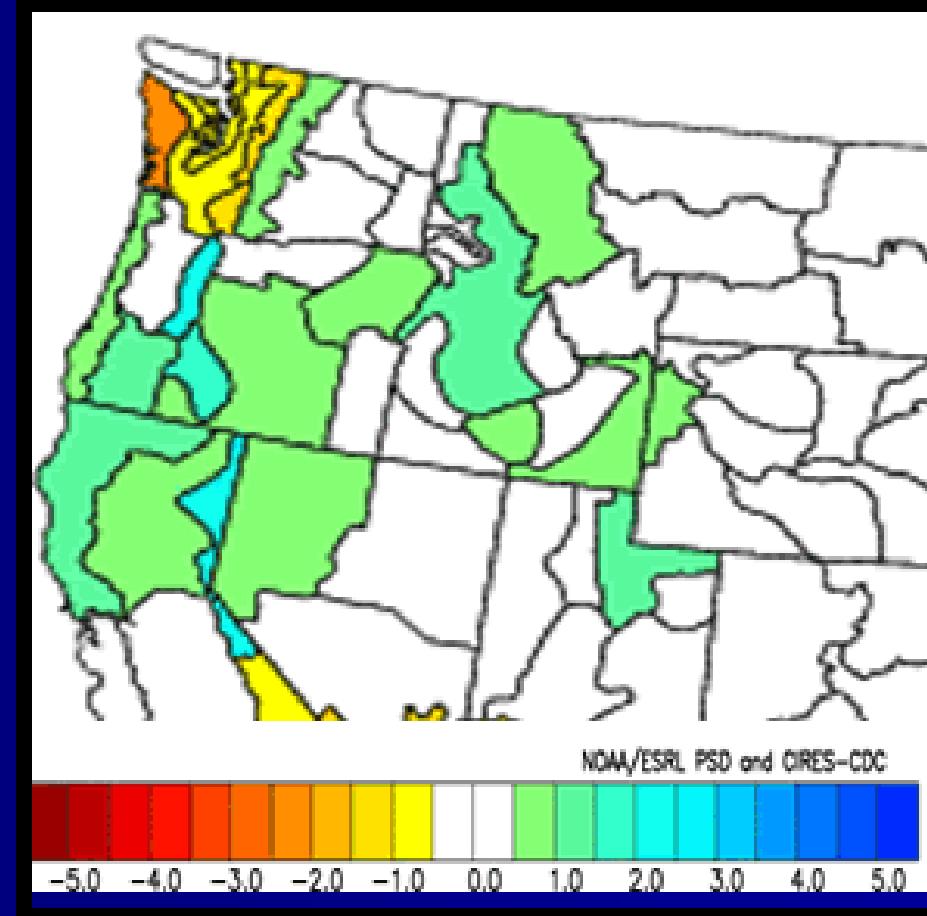


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La Niña Impacts



Temperature



Precipitation



Winter Outlook 2008-09

NOAA's Definitions of El Niño and La Niña Events

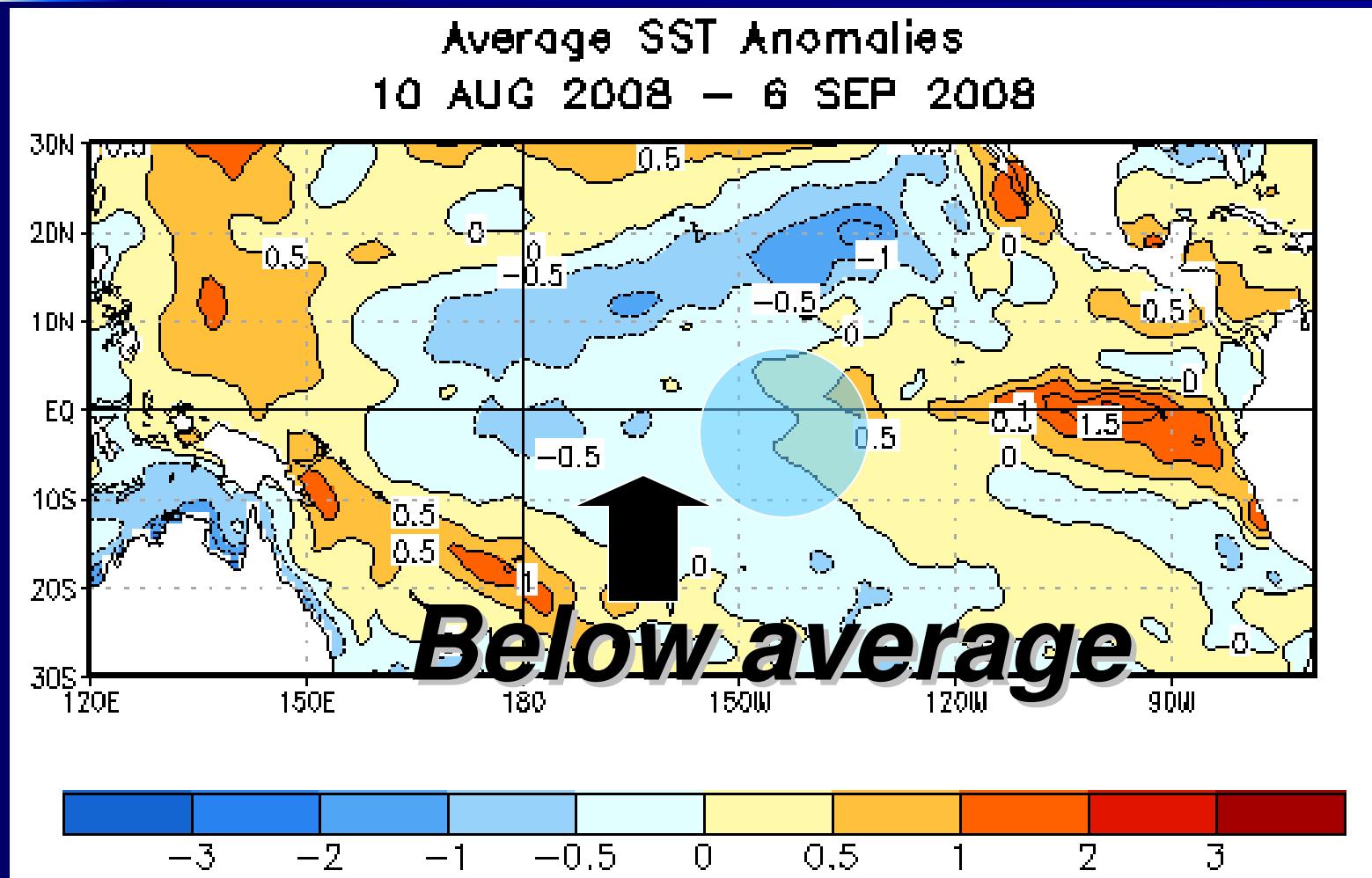
NOAA monitors the Oceanic Niño Index (ONI), a 3-month running average of Sea Surface Temperature departures along the central tropical Pacific.

- ¤ El Niño = Positive ONI $\geq +0.5^{\circ}\text{C}$
- ¤ La Niña = Negative ONI $\leq -0.5^{\circ}\text{C}$



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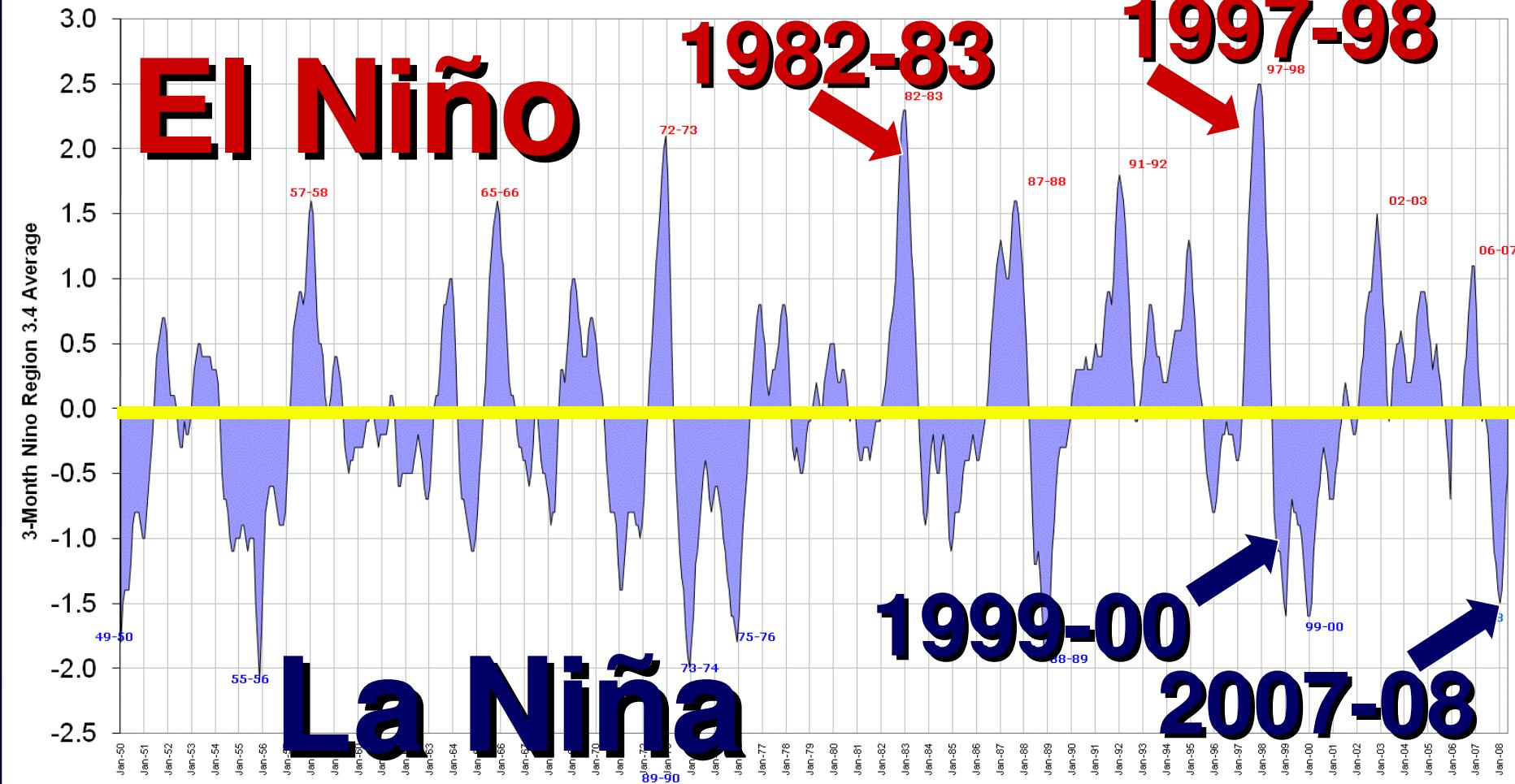
What's Happening in Pacific?





ONI Trend 1950-2008

Oceanic Niño Index (ONI)



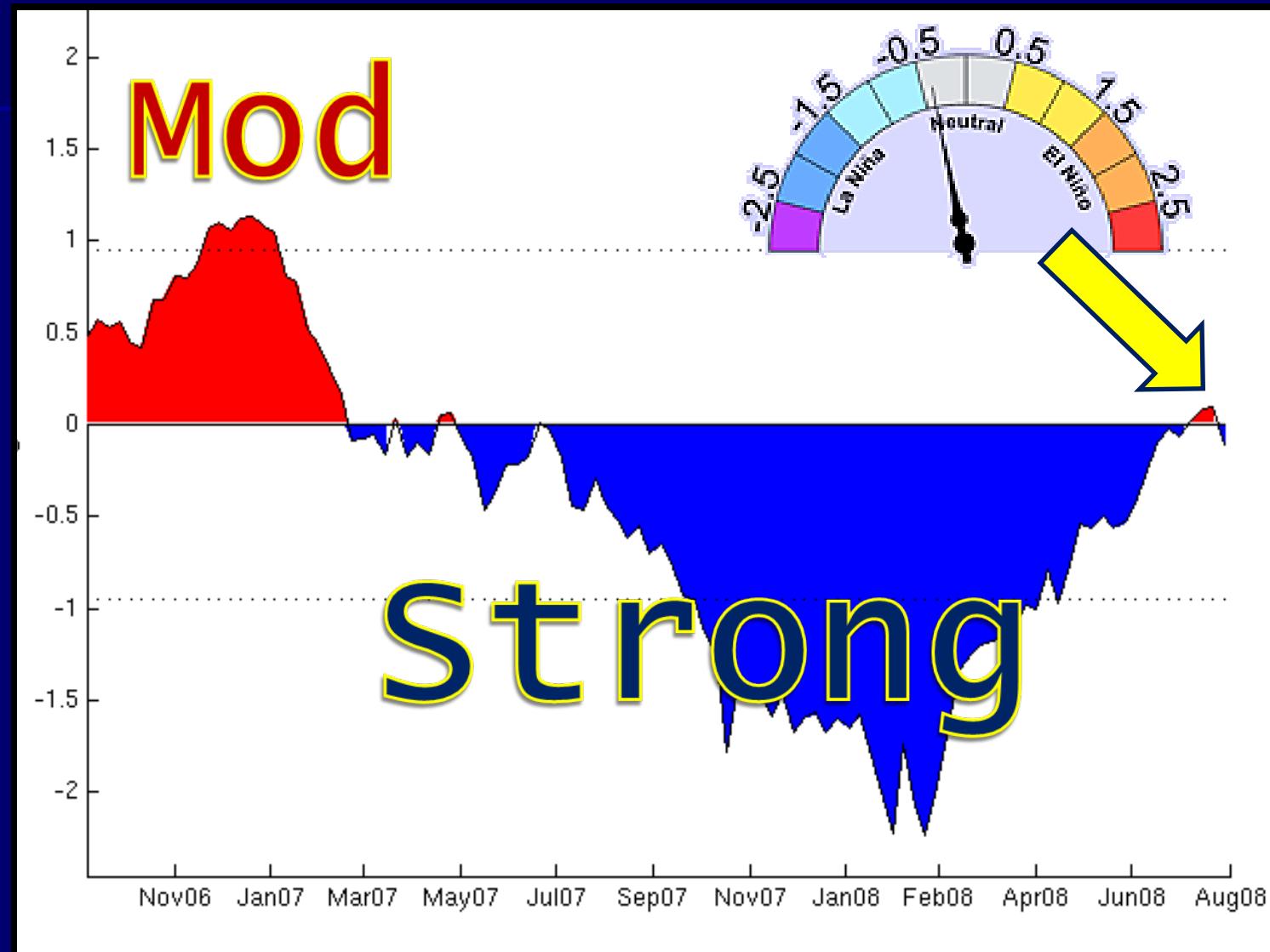


Since Fall of 2006...

Weak
0.5-0.9°C

Moderate
1.0-1.4°C

Strong
 $\geq 1.5^{\circ}\text{C}$





Southern Oscillation Index (SOI)

Pressure correlations between Indian Ocean
and the eastern tropical Pacific Ocean.

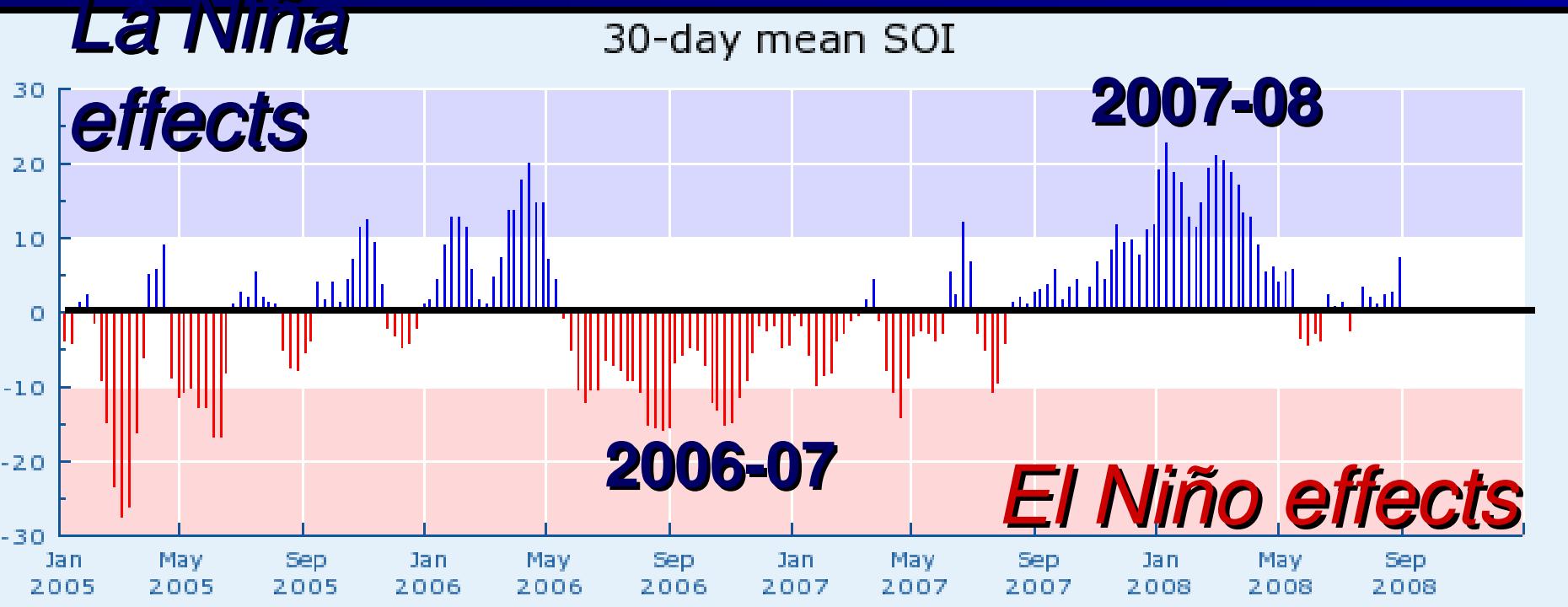
*La Niña
effects*

30-day mean SOI

2007-08

2006-07

El Niño effects





Southern Oscillation Index (SOI)

Strong Correlations with summer SOI and winter rainfall, snowfall, and temperatures

In general...

La Niña summers (positive SOI)...

- = above average winter precipitation
- = below average winter temperatures.

El Niño summers (negative SOI)...

- = below average winter precipitation
- = above average winter temperatures.¹⁰

Southern Oscillation Index (SOI)

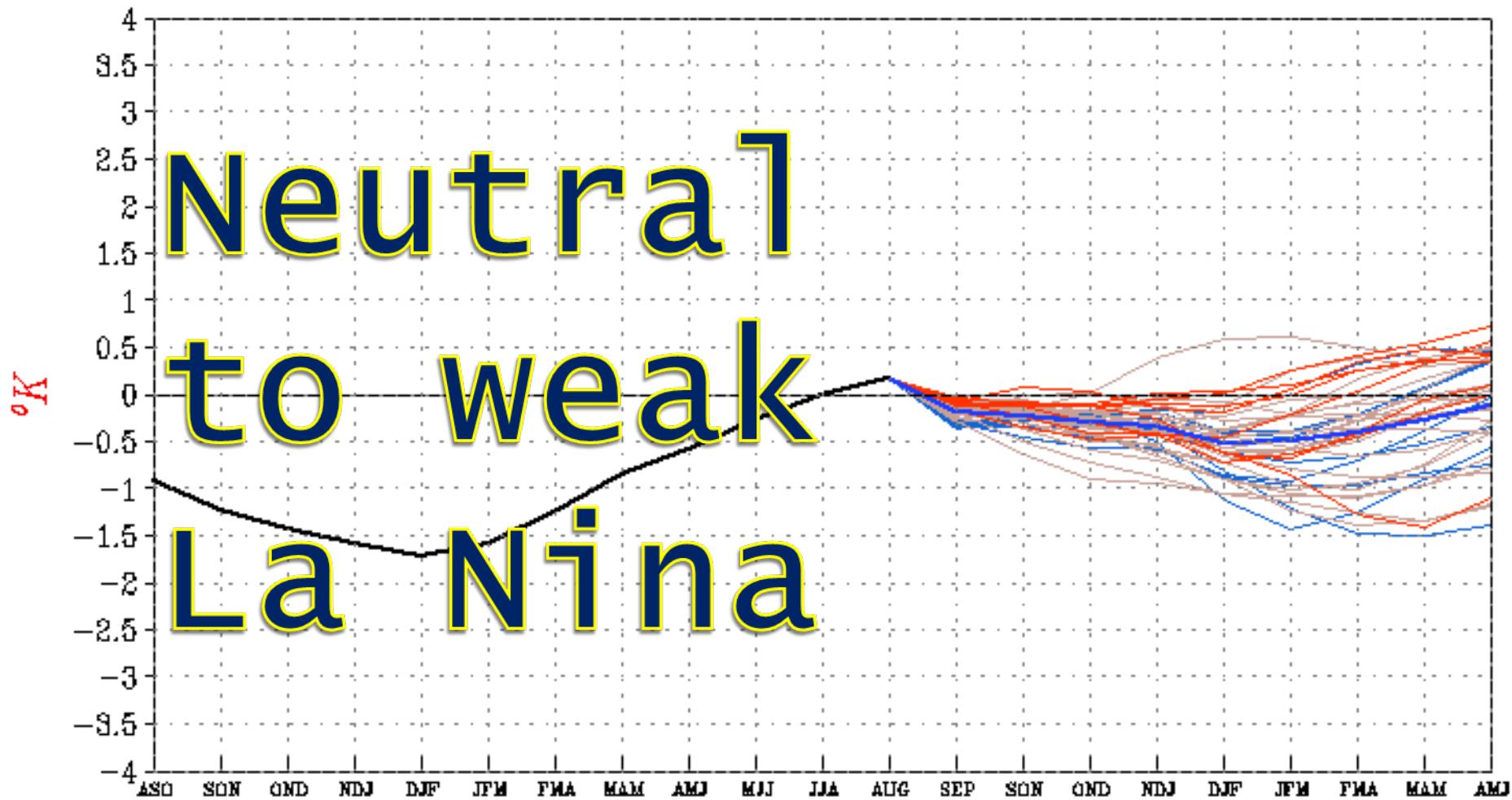


Summer 2008 SOI
Slightly Positive

So, indicates weak
La Nina effects
continue through
November.



Forecast thru Apr 2009



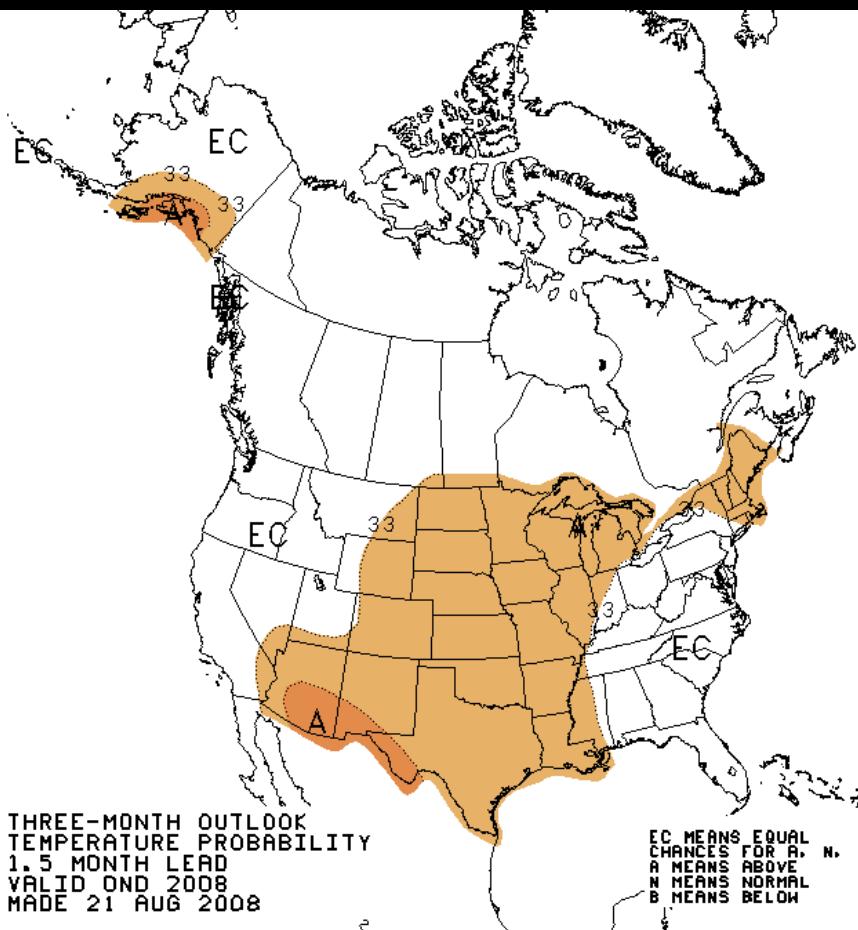


But, What Will Winter Be Like?

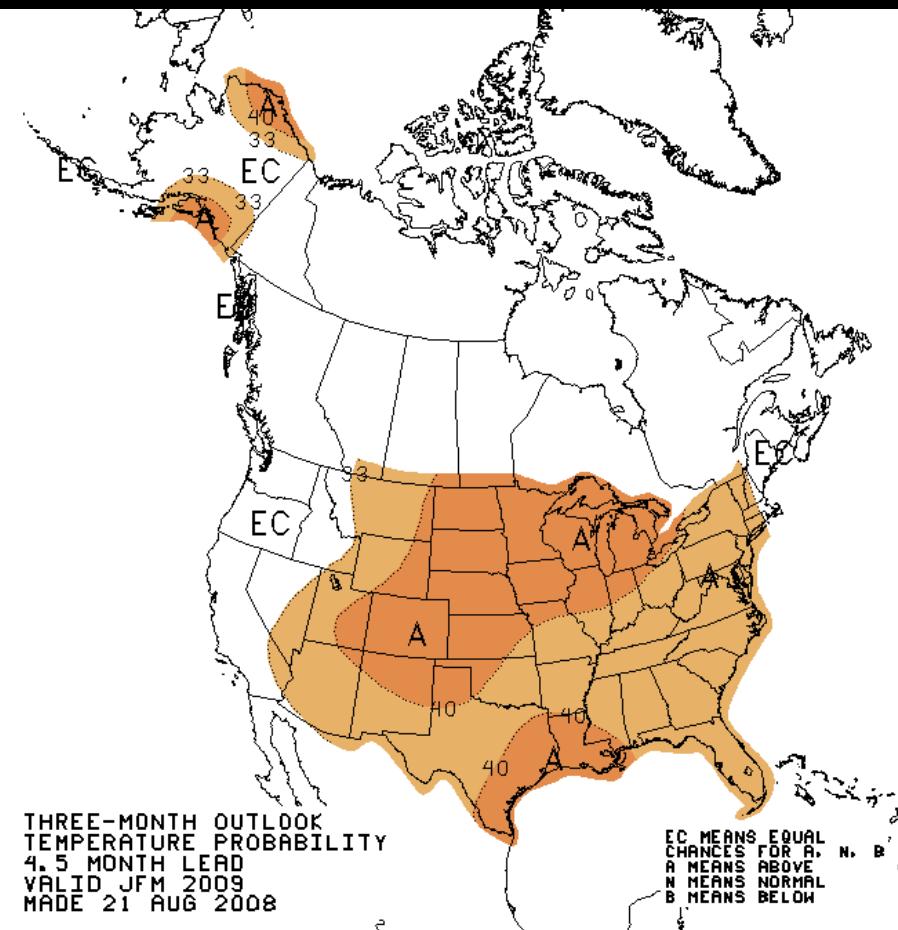


Winter Outlook 2008-09

Temperature Probabilities



October - December



January - March



Winter Outlook 2008-09

So, will
there be
a lot of
rain this
Winter?

MCHUMOR.com by T. McCracken



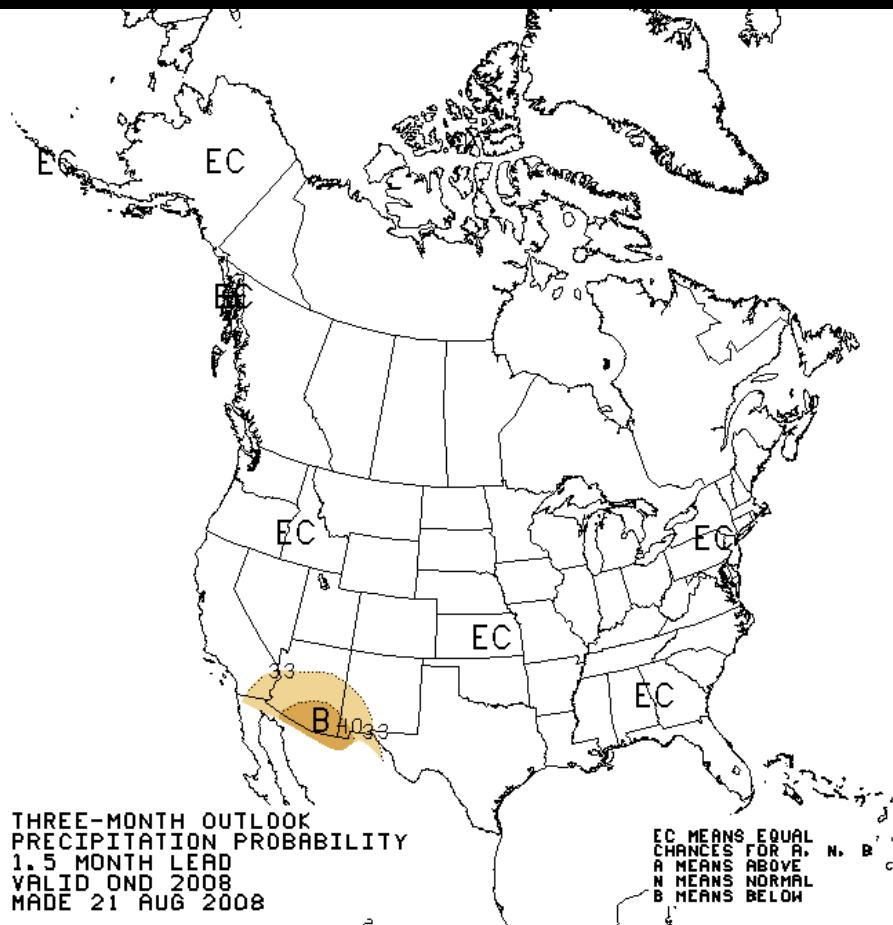
"Although the Weather Service hasn't predicted rain, certain indicators can't be ignored."

Cartoon used with permission by T. McCracken

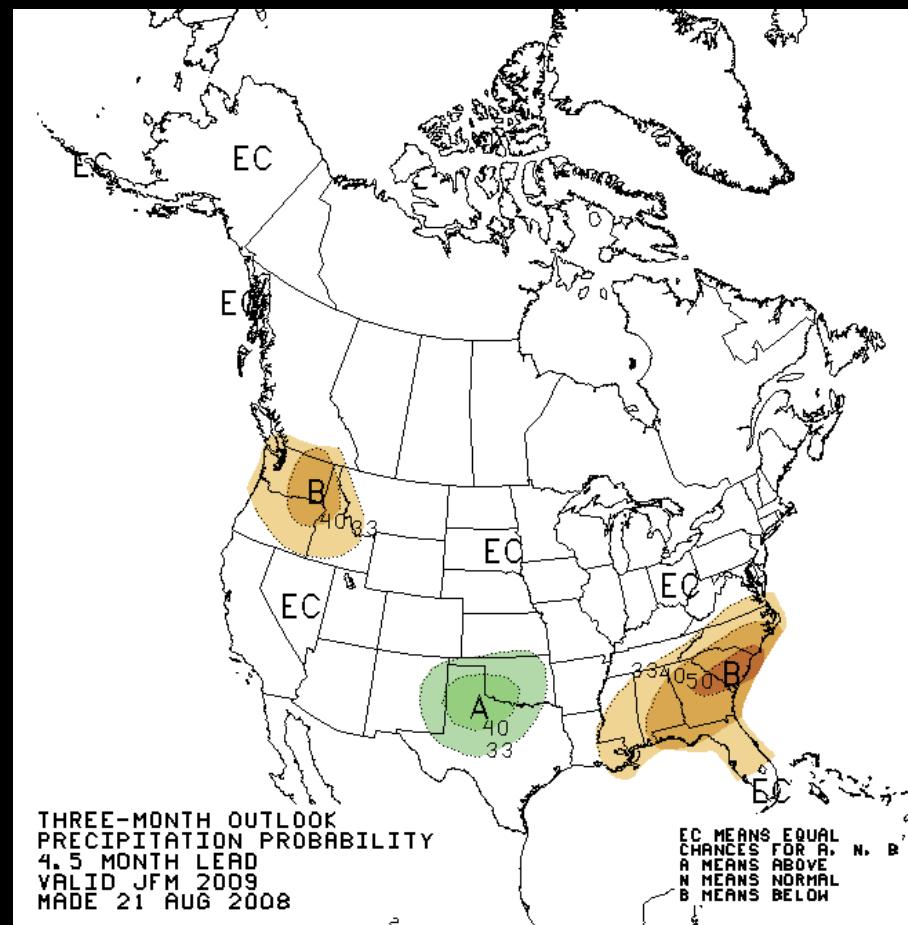


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Precipitation Probabilities



October - December

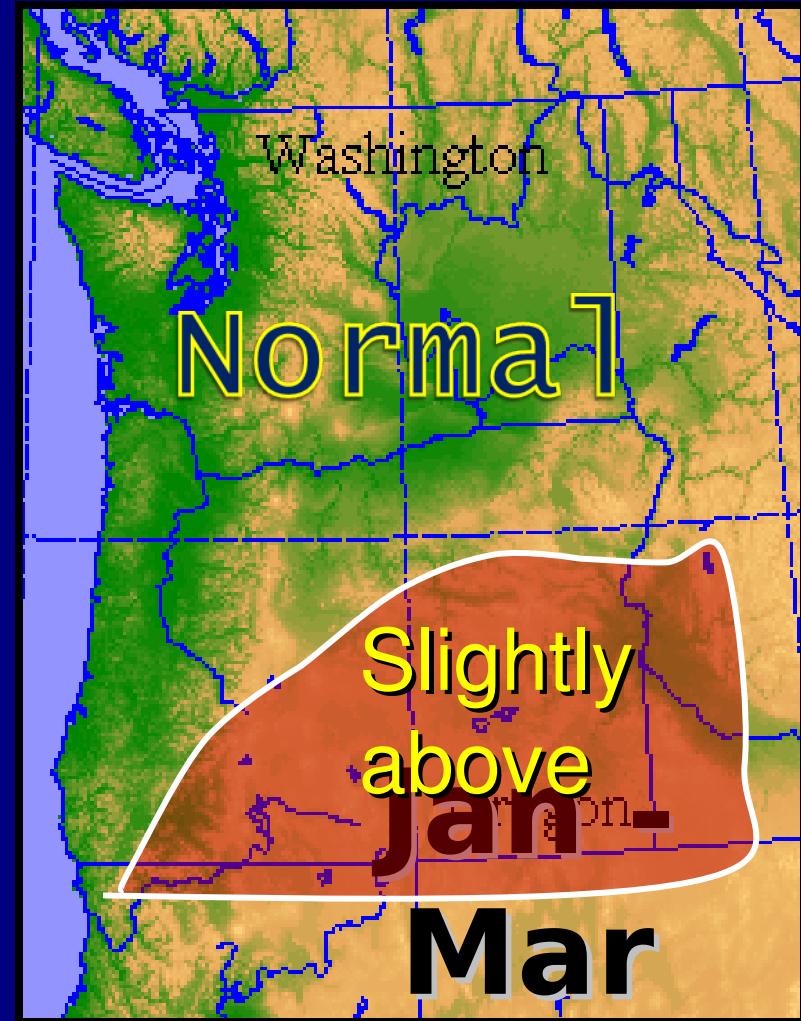
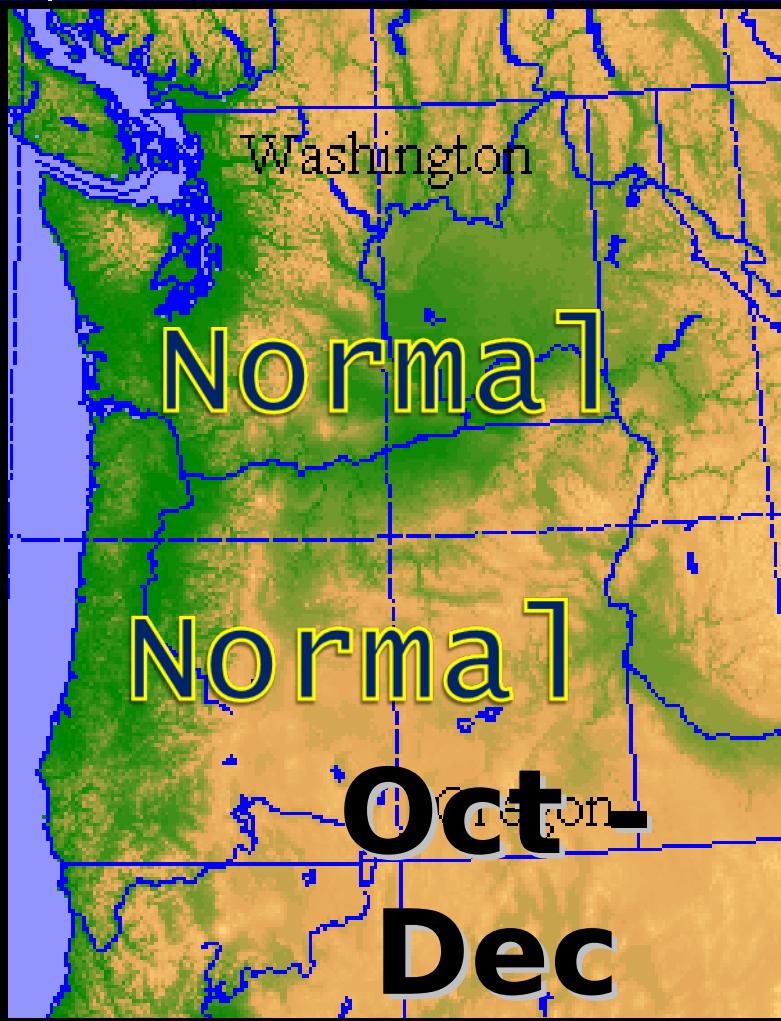


January - March



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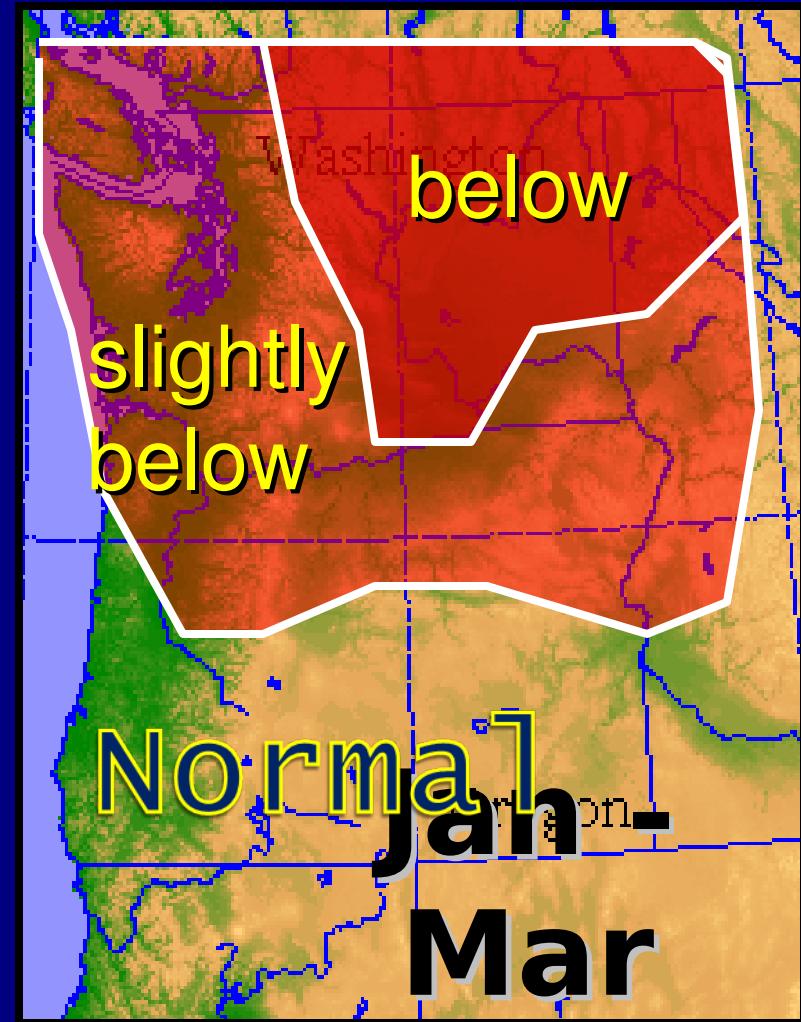
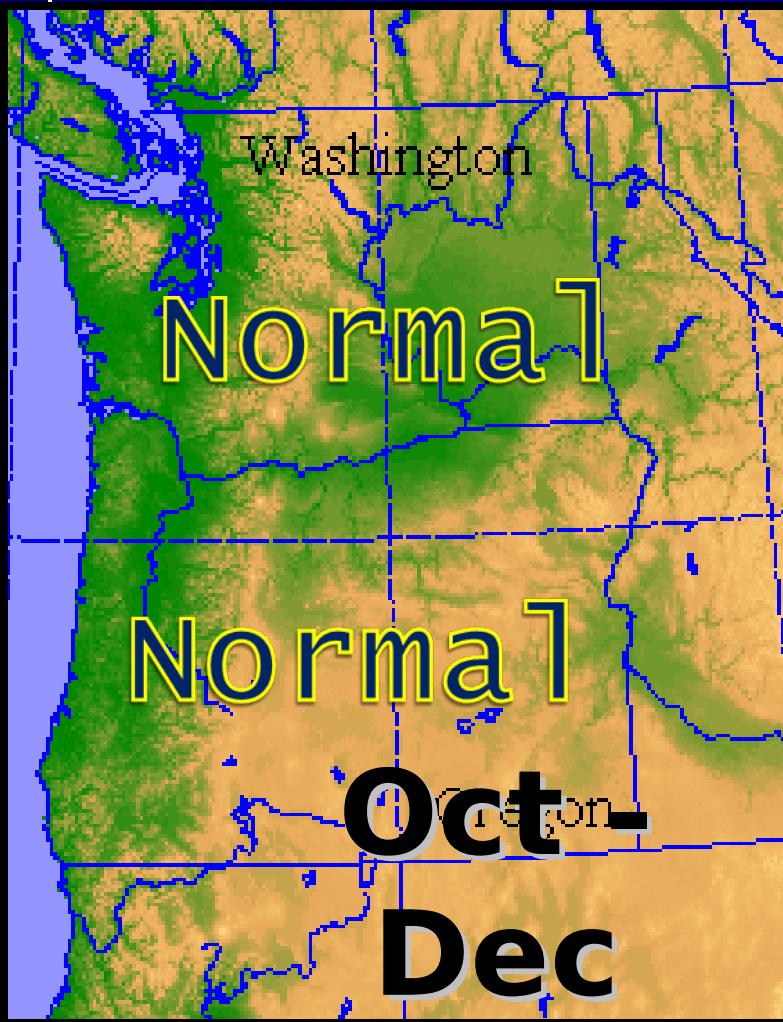
Temperature Outlook





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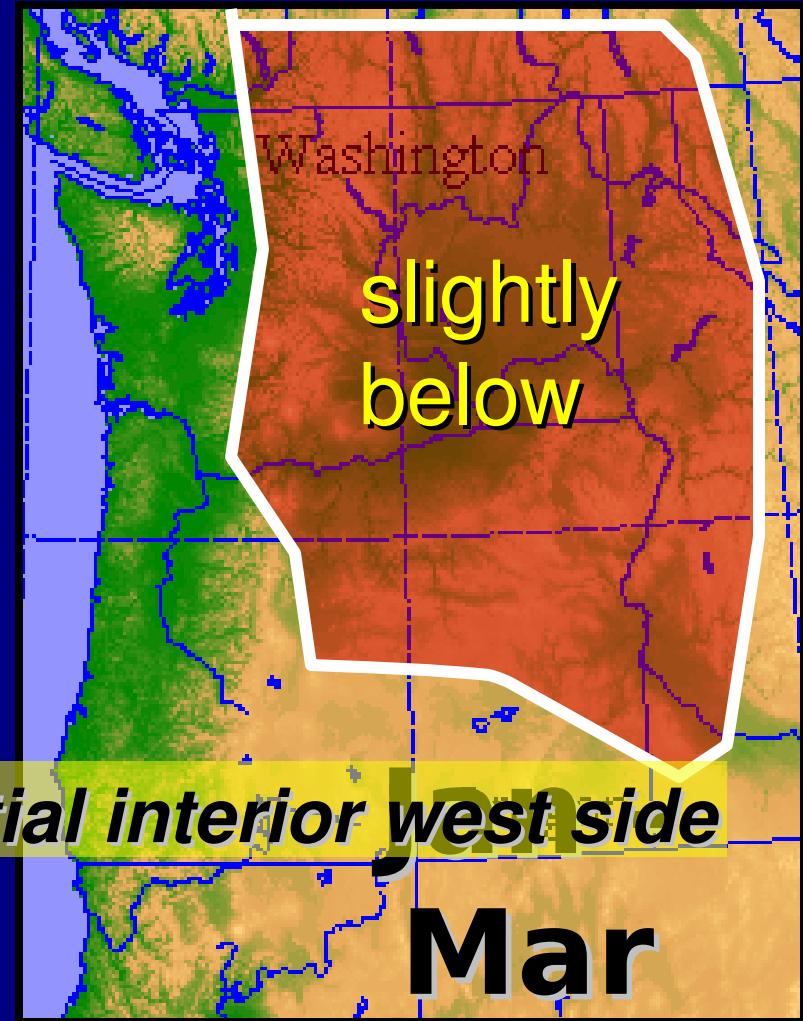
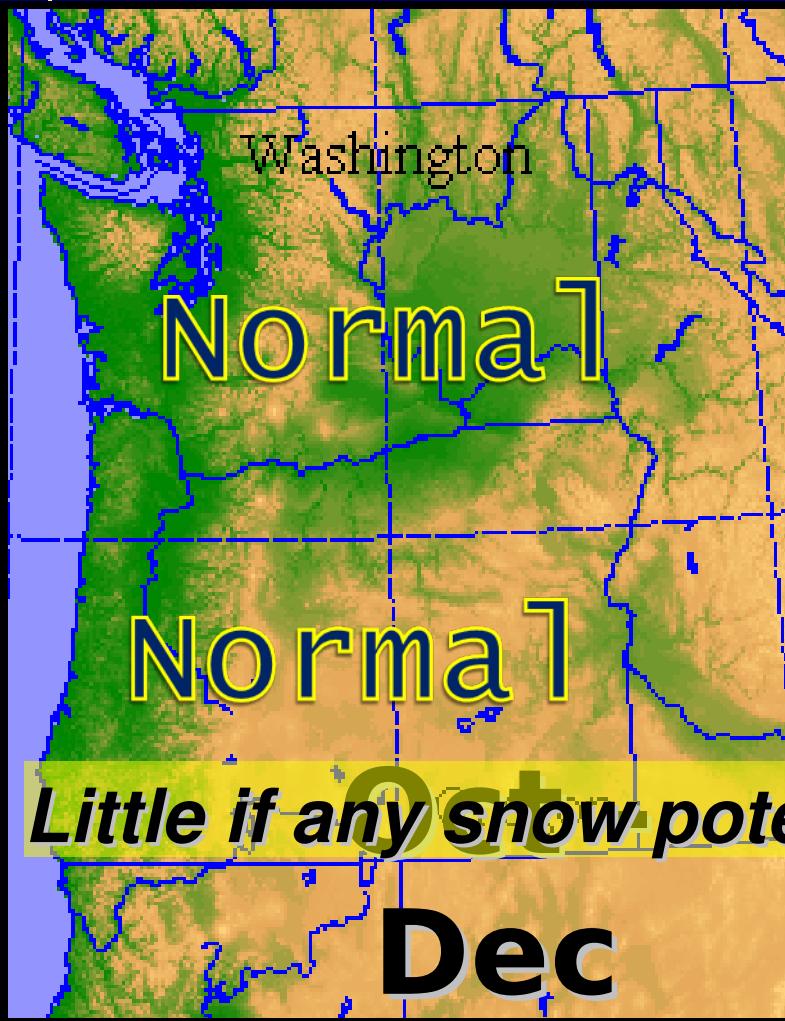
Rainfall Outlook





Winter Outlook 2008-09

Snowfall Outlook





Winter Outlook 2008-09

Windstorm Outlook

Coast

*Storms with
winds at least:*

55-70 mph: 5-8

70-85 mph: 3

85+ mph: 1

West Inland

*Storms with
winds at least:*

45-55 mph: 4-7

60-70 mph: 2

70+ mph: 0



Winter Outlook 2008-09

Summary

- ▶ Neutral year, with minor La Niña effects.
- ▶ Near Normal Temperatures.
- ▶ Normal Precipitation thru Dec, then turning a bit drier than normal.
- ▶ Little if any threat of low elev. inland snowfall.
- ▶ 6-8 low to moderate windstorms on Coast.
1 strong storm (*over 85 mph winds*)



2008/2009 Water Supply Outlook Columbia River at The Dalles

